504)



DATE: 02/13/2002

90

PCT10

TIME: 07:37:08 PATENT APPLICATION: US/10/031,915 Input Set : A:\PF-0722 PCT (sequence listing).txt Output Set: N:\CRF3\02132002\J031915.raw 2 <110> APPLICANT: INCYTE GENOMICS, INC. HILLMAN, Jennifer L. 3 LAL, Preeti 4 TANG, Y. Tom 5 YUE, Henry 6 7 AU-YOUNG, Janice ENTERED 8 BANDMAN, Olga 9 AZIMZAI, Yalda YANG, Junming 10 LU, Dyung Aina M. 11 BAUGHN, Mariah R. 12 PATTERSON, Chandra 13 14 SHAH, Purvi W--> 15 <120> TITLE OF INVENTION: CELL CYCLE AND PROLIFERATION PROTEINS W--> 16 <130> FILE REFERENCE: PF-0722 PCT W--> 17 <140> CURRENT APPLICATION NUMBER: To Be Assigned C--> 18 <141> CURRENT FILING DATE: 2002-01-18 19 <150> PRIOR APPLICATION NUMBER: 60/145,075; 60/153,129; 60/164,647 W--> 20 <151> PRIOR FILING DATE: 1999-07-21; 1999-09-08; 1999-11-10 W--> 21 <160> NUMBER OF SEQ ID: 108 22 <170> SOFTWARE: PERL Program W--> 23 <210> SEQ ID NO: 1 24 <211> LENGTH: 145 25 <212> TYPE: PRT 26 <213> ORGANISM: Homo sapiens W--> 27 <220> FEATURE: 28 <221> NAME/KEY: misc_feature 29 <223> OTHER INFORMATION: Incyte ID No: 116462CD1 W--> 30 <400> SEQUENCE: 1 31 Met Asn Gly Arg Val Asp Tyr Leu Val Thr Glu Glu Glu Ile Asn 10 32 1 33 Leu Thr Arg Gly Pro Ser Gly Leu Gly Phe Asn Ile Val Gly Gly 2.5 20 35 Thr Asp Gln Gln Tyr Val Ser Asn Asp Ser Gly Ile Tyr Val Ser 45 40 35 37 Arg Ile Lys Glu Asn Gly Ala Ala Ala Leu Asp Gly Arg Leu Gln 55 50 38 39 Glu Gly Asp Lys Ile Leu Ser Val Asn Gly Gln Asp Leu Lys Asn 70 40 65

41 Leu Leu His Gln Asp Ala Val Asp Leu Phe Arg Asn Ala Gly Tyr

43 Ala Val Ser Leu Arg Val Gln His Arg Leu Gln Val Gln Asn Gly

80

95

85

100

RAW SEQUENCE LISTING

42

44

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/031,915

DATE: 02/13/2002

Input Set : A:\PF-0722 PCT (sequence listing).txt

- 51 <210> SEQ ID NO: 2
- 52 <211> LENGTH: 340
- 53 <212> TYPE: PRT
- 54 <213> ORGANISM: Homo sapiens
- W--> 55 <220> FEATURE:
 - 56 <221> NAME/KEY: misc_feature
 - 57 <223> OTHER INFORMATION: Incyte ID No: 1210462CD1
- W--> 58 <400> SEQUENCE: 2
 - 59 Met Leu Thr Gln Leu Lys Ala Lys Ser Glu Gly Lys Leu Ala Lys
 - 61 Gln Ile Cys Lys Val Val Leu Asp His Phe Glu Lys Gln Tyr Ser
 - 62 20 25 30
 - 63 Lys Glu Leu Gly Asp Ala Trp Asn Thr Val Arg Glu Ile Leu Thr 64 35 40 45
 - 65 Ser Pro Ser Cys Trp Gln Tyr Ala Val Leu Leu Asn Arg Phe Asn
 - 50 55 60 67 Tyr Pro Phe Glu Leu Glu Lys Asp Leu His Leu Lys Gly Tyr His
 - 68 65 70 75
 - 69 Thr Leu Ser Gln Gly Ser Leu Pro Asn Tyr Pro Lys Ser Val Lys
 70 80 85 90
 - 71 Cys Tyr Leu Ser Arg Thr Pro Gly Arg Ile Pro Ser Glu Arg His 72 95 100 105
 - 73 Gln Ile Gly Asn Leu Lys Lys Tyr Tyr Leu Leu Asn Ala Ala Ser 74 110 115 120
 - 75 Leu Leu Pro Val Leu Ala Leu Glu Leu Arg Asp Gly Glu Lys Val
 - 76 125 130 135
 - 77 Leu Asp Leu Cys Ala Ala Pro Gly Gly Lys Ser Ile Ala Leu Leu 78 140 145 150
 - 79 Gln Cys Ala Cys Pro Gly Tyr Leu His Cys Asn Glu Tyr Asp Ser
 - 80 155 160 165 81 Leu Arg Leu Arg Trp Leu Arg Gln Thr Leu Glu Ser Phe Ile Pro
 - 82 170 175 180
 - 83 Gln Pro Leu Ile Asn Val Ile Lys Val Ser Glu Leu Asp Gly Arg
 - 84 185 190 195
 - 85 Lys Met Gly Asp Ala Gln Pro Glu Met Phe Asp Lys Val Leu Val 86 200 205 210
 - 87 Asp Ala Pro Cys Ser Asn Asp Arg Ser Trp Leu Phe Ser Ser Asp
 - 88 215 220 225 89 Ser Gln Lys Ala Ser Cys Arg Ile Ser Gln Arg Arg Asn Leu Pro
 - 90 230 235 240 91 Leu Leu Gln Ile Glu Leu Leu Arg Ser Ala Ile Lys Ala Leu Arg
 - 92 245 250 255 93 Pro Gly Gly Ile Leu Val Tyr Ser Thr Cys Thr Leu Ser Lys Ala





RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/031,915

DATE: 02/13/2002 TIME: 07:37:08

Input Set : A:\PF-0722 PCT (sequence listing).txt

```
270
                        260
                                             265
     95 Glu Asn Gln Asp Val Ile Ser Glu Ile Leu Asn Ser His Gly Asn
                                             280
                        275
     97 Ile Met Pro Met Asp Ile Lys Gly Ile Ala Arg Thr Cys Ser His
                        290
     99 Asp Phe Thr Phe Ala Pro Thr Gly Gln Glu Cys Gly Leu Leu Val
                                              310
                         305
     101 Ile Pro Asp Lys Gly Lys Ala Trp Gly Pro Met Tyr Val Ala Lys
                         320
     102
     103 Leu Lys Lys Ser Trp Ser Thr Gly Lys Trp
                         335
     104
     105 <210> SEQ ID NO: 3
     106 <211> LENGTH: 418
     107 <212> TYPE: PRT
     108 <213> ORGANISM: Homo sapiens
W--> 109 <220> FEATURE:
     110 <221> NAME/KEY: misc_feature
     111 <223> OTHER INFORMATION: Incyte ID No: 1305252CD1
W--> 112 <400> SEQUENCE: 3
     113 Met Leu Tyr Leu Glu Asp Tyr Leu Glu Met Ile Glu Gln Leu Pro
     115 Met Asp Leu Arg Asp Arg Phe Thr Glu Met Arg Glu Met Asp Leu
                          20
                                               25
     117 Gln Val Gln Asn Ala Met Asp Gln Leu Glu Gln Arg Val Ser Glu
                                               40
                          35
     118
     119 Phe Phe Met Asn Ala Lys Lys Asn Lys Pro Glu Trp Arg Glu Glu
     120
                          50
                                               55
     121 Gln Met Ala Ser Ile Lys Lys Asp Tyr Tyr Lys Ala Leu Glu Asp
                          65
     123 Ala Asp Glu Lys Val Gln Leu Ala Asn Gln Ile Tyr Asp Leu Val
                                               85
                          80
     125 Asp Arg His Leu Arg Lys Leu Asp Gln Glu Leu Ala Lys Phe Lys
                          95
                                              100
     126
     127 Met Glu Leu Glu Ala Asp Asn Ala Gly Ile Thr Glu Ile Leu Glu
                                              115
                         110
     128
     129 Arg Arg Ser Leu Glu Leu Asp Thr Pro Ser Gln Pro Val Asn Asn
                         125
     130
     131 His His Ala His Ser His Thr Pro Val Glu Lys Arg Lys Tyr Asn
                                              145
                         140
     133 Pro Thr Ser His His Thr Thr Asp His Ile Pro Glu Lys Lys
                         155
                                              160
     134
     135 Phe Lys Ser Glu Ala Leu Leu Ser Thr Leu Thr Ser Asp Ala Ser
                                              175
                         170
     137 Lys Glu Asn Thr Leu Gly Cys Arg Asn Asn Asn Ser Thr Ala Ser
                                              190
                         185
     138
     139 Ser Asn Asn Ala Tyr Asn Val Asn Ser Ser Gln Pro Leu Gly Ser
                                              205
                         200
     141 Tyr Asn Ile Gly Ser Leu Ser Ser Gly Thr Gly Ala Gly Ala Ile
                                              220
```



RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/031,915

DATE: 02/13/2002 TIME: 07:37:08

Input Set : A:\PF-0722 PCT (sequence listing).txt

```
143 Thr Met Ala Ala Ala Gln Ala Val Gln Ala Thr Ala Gln Met Lys
     144
                                             235
     145 Glu Gly Arg Arg Thr Ser Ser Leu Lys Ala Ser Tyr Glu Ala Phe
                         245
    147 Lys Asn Asn Asp Phe Gln Leu Gly Lys Glu Phe Ser Met Ala Arg
                         260
                                             265
     149 Glu Thr Val Gly Tyr Ser Ser Ser Ser Ala Leu Met Thr Thr Leu
                                             280
                         275
     151 Thr Gln Asn Ala Ser Ser Ser Ala Ala Asp Ser Arg Ser Gly Arg
                         290
                                             295
     153 Lys Ser Lys Asn Asn Lys Ser Ser Ser Gln Gln Ser Ser Ser
                         305
                                             310
     155 Ser Ser Ser Ser Ser Ser Leu Ser Ser Cys Ser Ser Ser Ser Thr
                                                                  330
                                             325
     157 Val Val Gln Glu Ile Ser Gln Gln Thr Thr Val Val Pro Glu Ser
                         335
     159 Asp Ser Asn Ser Gln Val Asp Trp Thr Tyr Asp Pro Asn Glu Pro
     161 Arg Tyr Cys Ile Cys Asn Gln Val Ser Tyr Gly Glu Met Val Gly
                                             370
                         365
     163 Cys Asp Asn Gln Asp Cys Pro Ile Glu Trp Phe His Tyr Gly Cys
                         380
                                             385
     165 Val Gly Leu Thr Glu Ala Pro Lys Gly Lys Trp Tyr Cys Pro Gln
                                             400
                         395
     167 Cys Thr Ala Ala Met Lys Arg Arg Gly Ser Arg His Lys
                                             415
                         410
     169 <210> SEQ ID NO: 4
     170 <211> LENGTH: 297
     171 <212> TYPE: PRT
     172 <213> ORGANISM: Homo sapiens
W--> 173 <220> FEATURE:
     174 <221> NAME/KEY: misc_feature
     175 <223> OTHER INFORMATION: Incyte ID No: 1416289CD1
W--> 176 <400> SEQUENCE: 4
     177 Met Ala Tyr Asn Val Ile Ile Ile Tyr Phe Asn Phe Arg Cys Leu
                           5
     178
     179 Glu Trp Leu Leu Asn Asn Leu Met Thr His Gln Asn Val Glu Leu
     181 Phe Lys Glu Leu Ser Ile Asn Val Met Lys Gln Leu Ile Gly Ser
                          35
     183 Ser Asn Leu Phe Val Met Gln Val Glu Met Asp Ile Tyr Thr Ala
                          50
                                              55
     185 Leu Lys Lys Trp Met Phe Leu Gln Leu Val Pro Ser Trp Asn Gly
                                              70
                          65
     187 Ser Leu Lys Gln Leu Leu Thr Glu Thr Asp Val Trp Phe Ser Lys
                                              85
                          80
     189 Gln Arg Lys Asp Phe Glu Gly Met Ala Phe Leu Glu Thr Glu Gln
                                             100
                          95
     191 Gly Lys Pro Phe Val Ser Val Phe Arg His Leu Arg Leu Gln Tyr
```



RAW SEQUENCE LISTING DATE: 02/13/2002 PATENT APPLICATION: US/10/031,915 TIME: 07:37:08

Input Set : A:\PF-0722 PCT (sequence listing).txt
Output Set: N:\CRF3\02132002\J031915.raw

```
120
     192
                          110
                                              115
     193 Ile Ile Ser Asp Leu Ala Ser Ala Arg Ile Ile Glu Gln Asp Ala
                                              130
                          125
     195 Val Val Pro Ser Glu Trp Leu Ser Ser Val Tyr Lys Gln Gln Trp
                                                                   150
     196
                          140
                                              145
     197 Phe Ala Met Leu Arg Ala Glu Gln Asp Ser Glu Val Gly Pro Gln
     198
                          155
                                              160
     199 Glu Ile Asn Lys Glu Glu Leu Glu Gly Asn Ser Met Arg Cys Gly
                                                                   180
                                              175
                          170
     201 Arg Lys Leu Ala Lys Asp Gly Glu Tyr Cys Trp Arg Trp Thr Gly
     202
     203 Phe Asn Phe Gly Phe Asp Leu Leu Val Thr Tyr Thr Asn Arg Tyr
                                              205
     204
                          200
     205 Ile Ile Phe Lys Arg Asn Thr Leu Asn Gln Pro Cys Ser Gly Ser
                                                                   225
     207 Val Ser Leu Gln Pro Arg Arg Ser Ile Ala Phe Arg Leu Arg Lèu
     208
                          230
                                              235
                                                                   240
     209 Ala Ser Phe Asp Ser Ser Gly Lys Leu Ile Cys Ser Arg Thr Thr
                          245
                                              250
     211 Gly Tyr Gln Ile Leu Thr Leu Glu Lys Asp Gln Glu Gln Val Val
                          260
                                              265
     213 Met Asn Leu Asp Ser Arg Leu Leu Ile Phe Pro Leu Tyr Ile Cys
     214
                          275
                                              280
     215 Cys Asn Phe Leu Tyr Ile Ser Pro Glu Lys Lys Asn
     216
                          290
     217 <210> SEQ ID NO: 5
     218 <211> LENGTH: 184
     219 <212> TYPE: PRT
     220 <213> ORGANISM: Homo sapiens
W--> 221 <220> FEATURE:
     222 <221> NAME/KEY: misc_feature
     223 <223> OTHER INFORMATION: Incyte ID No: 1558289CD1
W--> 224 <400> SEQUENCE: 5
     225 Met Glu Ser Phe Ser Ser Lys Ser Leu Ala Leu Gln Ala Glu Lys
     226
           1
     227 Lys Leu Leu Ser Lys Met Ala Gly Arg Ser Val Ala His Leu Phe
                                                                    30
     228
                          20
                                               25
     229 Ile Asp Glu Thr Ser Ser Glu Val Leu Asp Glu Leu Tyr Arg Val
     231 Ser Lys Glu Tyr Thr His Ser Arg Pro Gln Ala Gln Arg Val Ile
                                               55
     232
                          50
     233 Lys Asp Leu Ile Lys Val Ala Ile Lys Val Ala Val Leu His Arg
     234
                          65
                                               70
     235 Asn Gly Ser Phe Gly Pro Ser Glu Leu Ala Leu Ala Thr Arg Phe
     236
                          80
                                               85
     237 Arg Gln Lys Leu Arg Gln Gly Ala Met Thr Ala Leu Ser Phe Gly
                                              100
                          95
     239 Glu Val Asp Phe Thr Phe Glu Ala Ala Val Leu Ala Gly Leu Leu
     240
                                                                   120
```

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to incure a corresponding explanation is presented in the <220> to ≤223> fields of each sequence using n or Xaa.





VERIFICATION SUMMARY

PATENT APPLICATION: US/10/031,915

DATE: 02/13/2002 TIME: 07:37:09

Input Set : A:\PF-0722 PCT (sequence listing).txt

```
L:15 M:283 W: Missing Blank Line separator, <120> field identifier
 L:16 M:283 W: Missing Blank Line separator, <130> field identifier
 L:17 M:283 W: Missing Blank Line separator, <140> field identifier
 L:17 M:270 C: Current Application Number differs, Replaced Current Application Number
 L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:20 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
 L:21 M:283 W: Missing Blank Line separator, <160> field identifier
 L:23 M:283 W: Missing Blank Line separator, <210> field identifier
 L:27 M:283 W: Missing Blank Line separator, <220> field identifier
 L:30 M:283 W: Missing Blank Line separator, <400> field identifier
 L:55 M:283 W: Missing Blank Line separator, <220> field identifier
 L:58 M:283 W: Missing Blank Line separator, <400> field identifier
 L:109 M:283 W: Missing Blank Line separator, <220> field identifier
 L:112 M:283 W: Missing Blank Line separator, <400> field identifier L:173 M:283 W: Missing Blank Line separator, <220> field identifier L:176 M:283 W: Missing Blank Line separator, <400> field identifier
 L:221 M:283 W: Missing Blank Line separator, <220> field identifier
 L:224 M:283 W: Missing Blank Line separator, <400> field identifier
 L:255 M:283 W: Missing Blank Line separator, <220> field identifier
 L:258 M:283 W: Missing Blank Line separator, <400> field identifier
 L:287 M:283 W: Missing Blank Line separator, <220> field identifier
 L:290 M:283 W: Missing Blank Line separator, <400> field identifier
 L:375 M:283 W: Missing Blank Line separator, <220> field identifier
 L:378 M:283 W: Missing Blank Line separator, <400> field identifier L:445 M:283 W: Missing Blank Line separator, <220> field identifier
 L:448 M:283 W: Missing Blank Line separator, <400> field identifier
 L:489 M:283 W: Missing Blank Line separator, <220> field identifier
 L:492 M:283 W: Missing Blank Line separator, <400> field identifier
 L:531 M:283 W: Missing Blank Line separator, <220> field identifier
 L:534 M:283 W: Missing Blank Line separator, <400> field identifier
 L:611 M:283 W: Missing Blank Line separator, <220> field identifier
 L:614 M:283 W: Missing Blank Line separator, <400> field identifier
 L:641 M:283 W: Missing Blank Line separator, <220> field identifier
 L:644 M:283 W: Missing Blank Line separator, <400> field identifier
 L:721 M:283 W: Missing Blank Line separator, <220> field identifier
 L:724 M:283 W: Missing Blank Line separator, <400> field identifier
 L:751 M:283 W: Missing Blank Line separator, <220> field identifier
 L:754 M:283 W: Missing Blank Line separator, <400> field identifier
 L:787 M:283 W: Missing Blank Line separator, <220> field identifier
 L:790 M:283 W: Missing Blank Line separator, <400> field identifier
 L:819 M:283 W: Missing Blank Line separator, <220> field identifier
 L:822 M:283 W: Missing Blank Line separator, <400> field identifier
 L:849 M:283 W: Missing Blank Line separator, <220> field identifier
 L:852 M:283 W: Missing Blank Line separator, <400> field identifier
 L:891 M:283 W: Missing Blank Line separator, <220> field identifier L:894 M:283 W: Missing Blank Line separator, <400> field identifier
 L:965 M:283 W: Missing Blank Line separator, <220> field identifier
 L:968 M:283 W: Missing Blank Line separator, <400> field identifier
```



VERIFICATION SUMMARY

PATENT APPLICATION: US/10/031,915

DATE: 02/13/2002

TIME: 07:37:09

Input Set : A:\PF-0722 PCT (sequence listing).txt

Output Set: N:\CRF3\02132002\J031915.raw

L:1011 M:283 W: Missing Blank Line separator, <220> field identifier L:1014 M:283 W: Missing Blank Line separator, <400> field identifier L:1077 M:283 W: Missing Blank Line separator, <220> field identifier L:1080 M:283 W: Missing Blank Line separator, <200> field identifier L:1103 M:283 W: Missing Blank Line separator, <400> field identifier L:4952 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95
L:5176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99
L:5177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99